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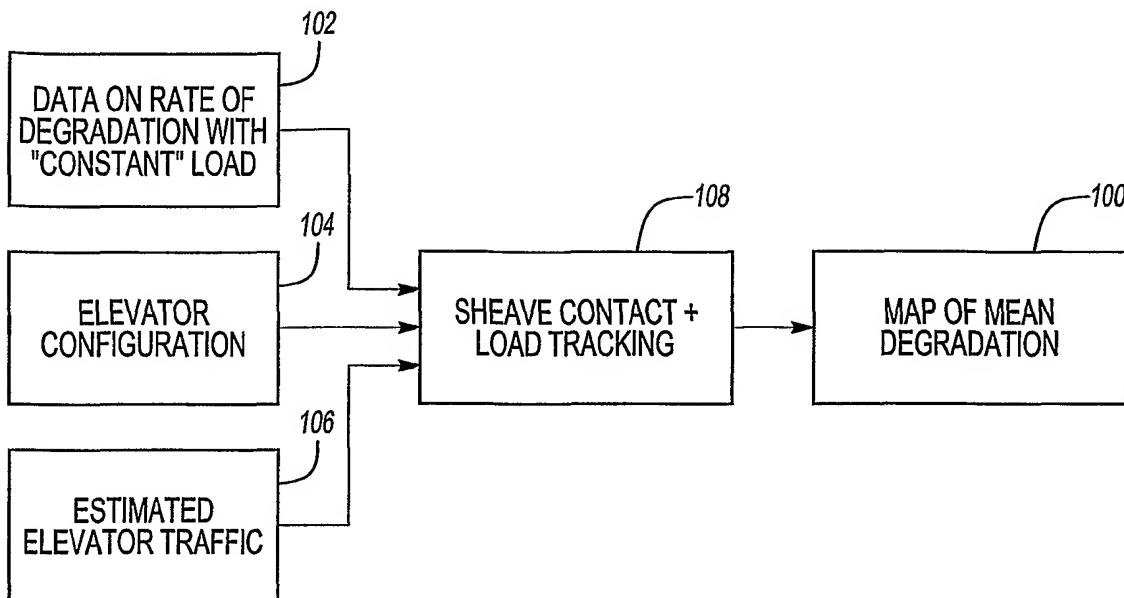
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(54) Title: TENSILE SUPPORT STRENGTH MEASUREMENT SYSTEM AND METHOD



(57) **Abstract:** A method and system determines probable strength degradation in a tensile support in an elevator system by monitoring an electrical characteristic of the tensile support as a whole, such as the total electrical resistance of the tensile support, that varies as the remaining strength in the tensile support varies. One example system determines a relationship between strength degradation and various physical factors, such as the rate of degradation for a given load (102), operating environment information for the tensile support (104), and estimated usage data (106), to obtain a map of mean degradation (100). This map of mean degradation (100) is then used to generate one or more maps linking the strength degradation and electrical characteristic.

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